EXECUTION OF INSTRUCTIONS THAT

LOCK AND UNLOCK COMPUTER RESOURCES

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ABSTRACT

When an atomic instruction executed by a computer processor locks a memory location, the locking is performed before the processor has determined whether

10   the instruction is to be executed to completion or canceled. The memory location is unlocked whether or not the instruction will be canceled. Since the locking operation can occur before it is known whether the instruction will be canceled, the reading of the

15   memory location can also occur early, before it is known whether the instruction will be canceled.